

RISE 2020

REGULATORY INDICATORS
FOR SUSTAINABLE ENERGY



SUSTAINING THE MOMENTUM



ABOUT ESMAP

The Energy Sector Management Assistance Program (ESMAP) is a partnership between the World Bank and 18 partners to help low- and middle-income countries reduce poverty and boost growth through sustainable energy solutions. ESMAP's analytical and advisory services are fully integrated within the World Bank's country financing and policy dialogue in the energy sector. Through the World Bank Group (WBG), ESMAP works to accelerate the energy transition required to achieve Sustainable Development Goal 7 (SDG7) to ensure access to affordable, reliable, sustainable, and modern energy for all. It helps to shape WBG strategies and programs to achieve the WBG Climate Change Action Plan targets. Learn more at: <https://esmap.org>

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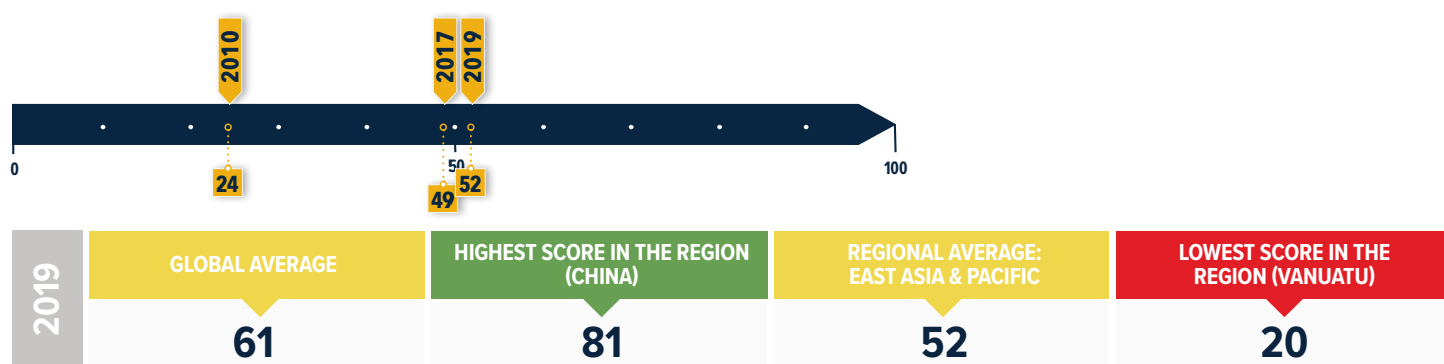
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REGIONAL BRIEFS

EAST ASIA AND PACIFIC



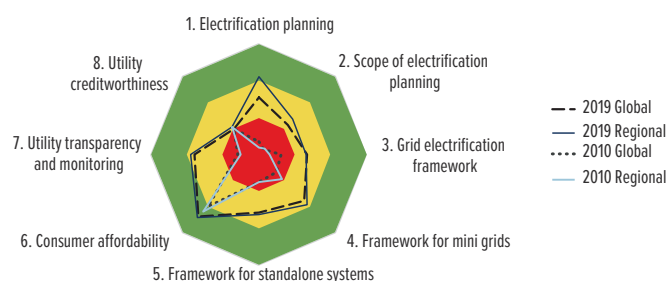
Source: World Bank, RISE 2020

KEY FINDINGS

- The East Asia and Pacific region scored 9 points lower than the global average (61) in 2019, making it the third-worst-performing region, ahead of South Asia and Sub-Saharan Africa.
- China remains the most advanced country in the region. The clean energy and access policies it has put in place since 2010 consistently scored much higher than the regional average.
- The fastest-improving countries between 2017 and 2019 were the Lao People's Democratic Republic (43), Singapore (79), and Indonesia (58). The three showed annual rates of improvement of 4.4, 2.5, and 2.3 points, respectively. Between 2017 and 2019, Indonesia was among the fastest improvers in the access-specific pillars—electricity access and clean cooking. Singapore was a top improver among the clean energy pillars.
- The regional average score for clean cooking (39) exceeded the global average by 2 points thanks to good scores on indicators such as institutional capacity, tracking progress, and financing mechanisms. Equally, the region's score for electricity access (55) exceeds the global average for the pillar by 2 points thanks to high scores on indicators such as consumer affordability and electrification plan.
- For energy efficiency and renewable energy, East Asia and Pacific lags slightly behind other access-deficit regions, mainly because of the low performance of countries such as Vanuatu and Solomon Islands. As a whole, however, the region is making good progress on indicators such as national energy efficiency planning and energy efficiency incentives, and on the legal framework for renewable energy.

INDICATOR PROGRESS BY PILLAR (OUT OF 100), 2010 AND 2019

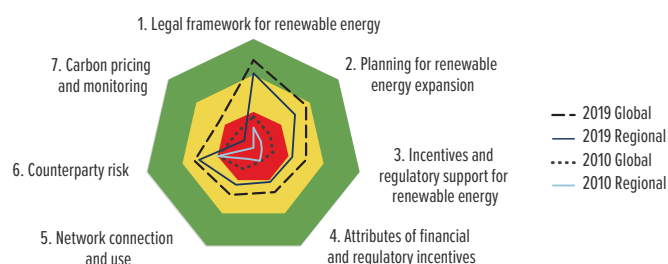
Electricity access



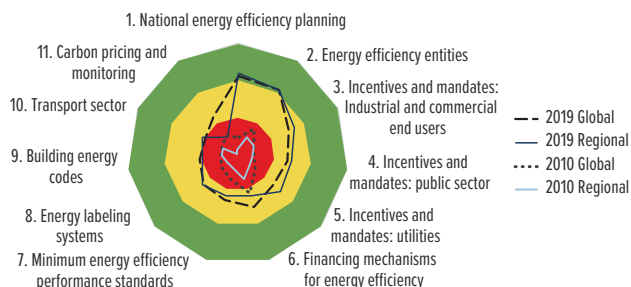
Clean cooking



Renewable energy



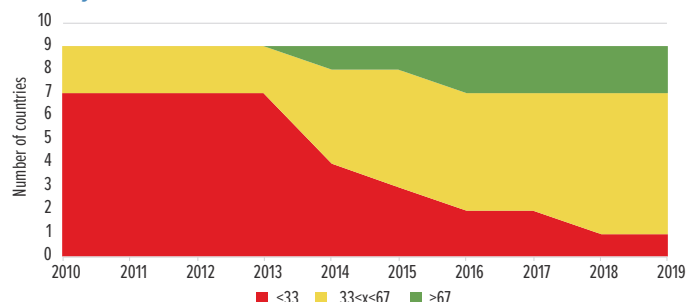
Energy efficiency



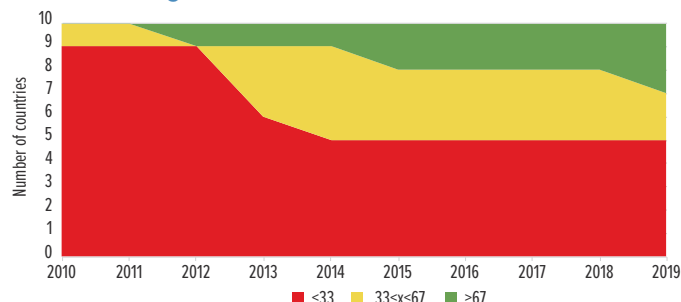
Source: World Bank, RISE 2020

DISTRIBUTION OF RISE SCORES BY PILLAR, 2010-19

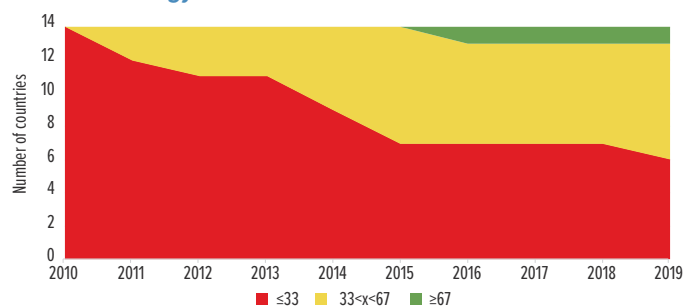
Electricity access^a



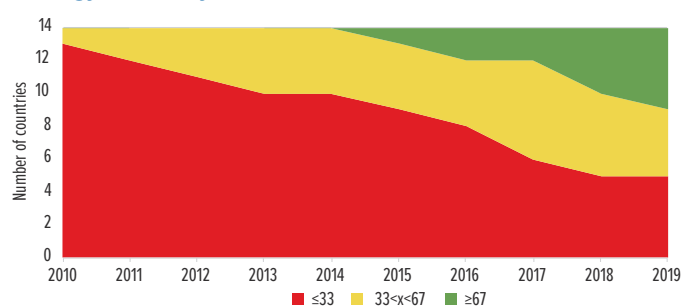
Clean cooking



Renewable energy^b



Energy efficiency



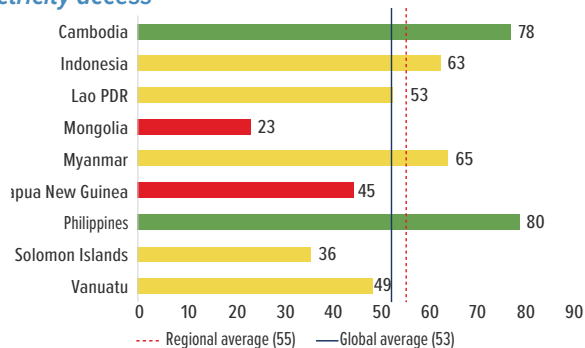
Source: World Bank, RISE 2020

a. The countries covered by the access pillars (electricity access and clean cooking) are Cambodia, Indonesia, Lao PDR, Mongolia, Myanmar, Papua New Guinea, Philippines, Solomon Islands, and Vanuatu. China is covered in clean cooking.

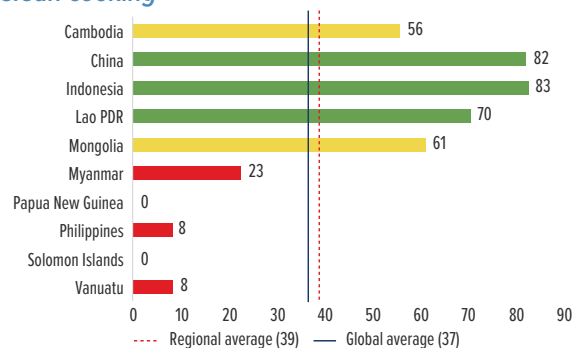
b. The countries covered by the clean energy pillars (renewable energy and energy efficiency) are Cambodia, China, Indonesia, Lao PDR, Malaysia, Mongolia, Myanmar, Papua New Guinea, Philippines, Singapore, Solomon Islands, Thailand, Vanuatu, and Vietnam.

COUNTRY SCORES BY PILLAR (OUT OF 100), 2019

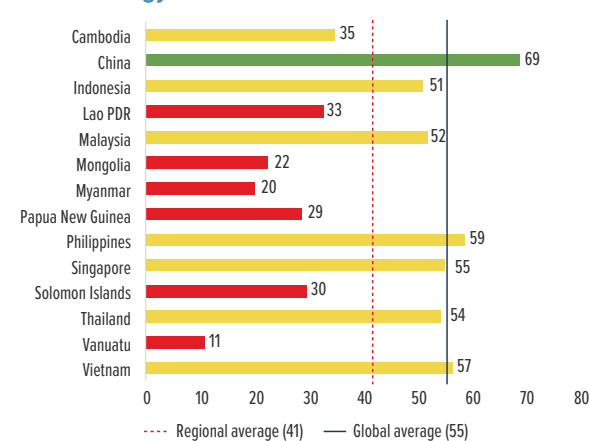
Electricity access



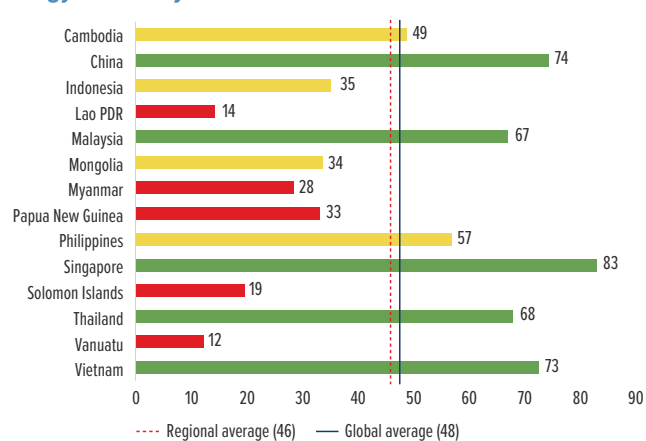
Clean cooking



Renewable energy

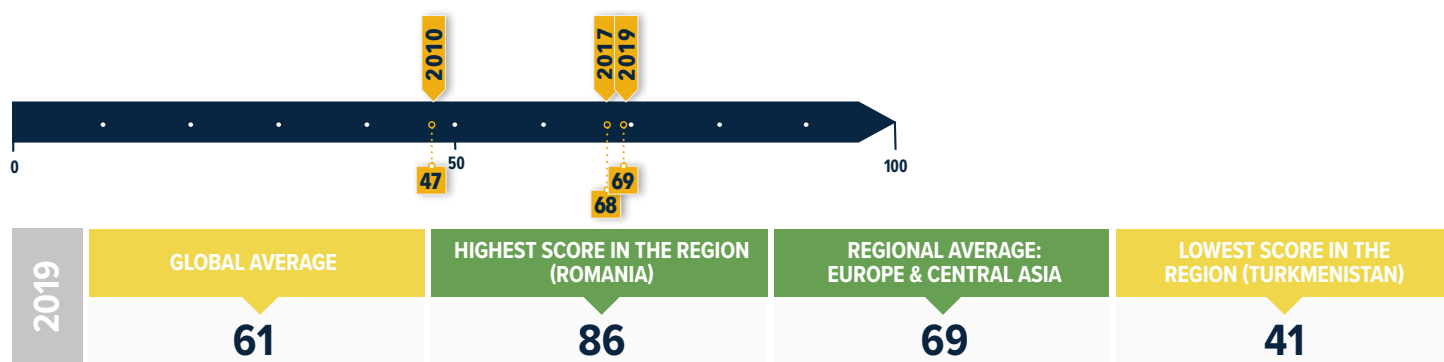


Energy efficiency



Source: World Bank, RISE 2020

EUROPE AND CENTRAL ASIA



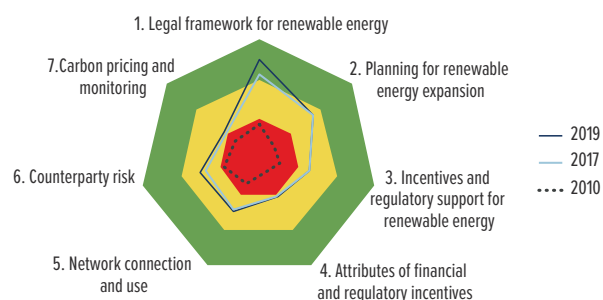
Source: World Bank, RISE 2020

KEY FINDINGS

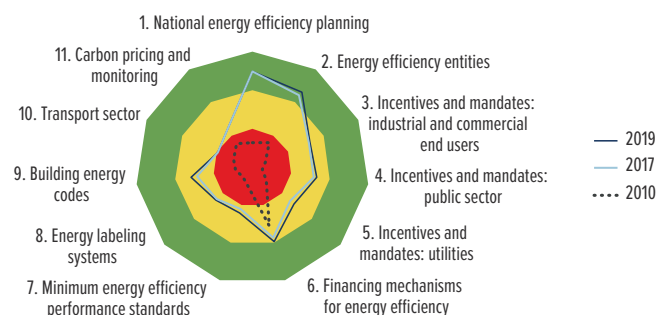
- The Europe and Central Asia region's average RISE 2020 score is significantly higher than the global average, and its scores for energy efficiency are higher than those for renewable energy¹.
- Romania leads the region in developing sustainable energy policy across the pillars of the RISE 2020 index. Bulgaria and Turkey have made marked advances in their clean energy policies.
- Bosnia and Herzegovina and Montenegro were the fastest improvers in the Europe and Central Asia region between 2017 and 2019, chiefly because of their adoption of policies pertaining to financial and regulatory incentives and because they reduced counterparty risks in renewable energy.
- In the energy efficiency pillar, indicators such as minimum energy efficiency standards, energy labeling systems, transport sector policies, and carbon pricing and monitoring seemed to lag behind the rest.
- For the renewable energy pillar, attributes of financial and regulatory incentives and carbon pricing and monitoring are the indicators that appear to have improved most slowly.

INDICATOR PROGRESS BY PILLAR (OUT OF 100), 2010, 2017 AND 2019

Renewable energy



Energy efficiency

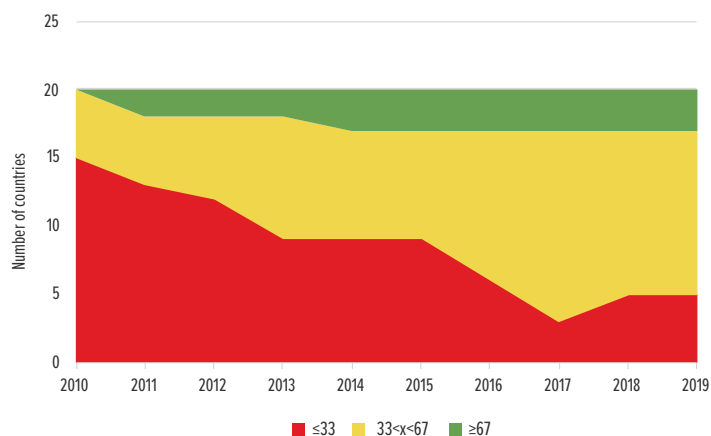


Source: World Bank, RISE 2020

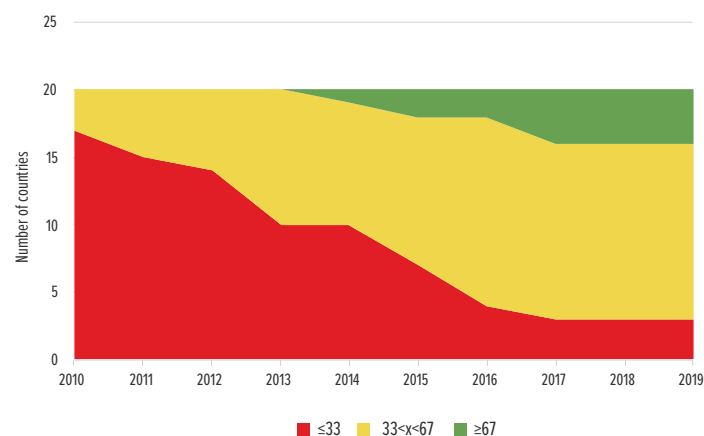
¹ Europe and Central Asia region is considered a nondeficit region, so all countries are assumed to have 100 percent electrification rates. The countries covered by the clean energy pillars (renewable energy and energy efficiency) are Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Kazakhstan, Kosovo, Kyrgyz Republic, Montenegro, North Macedonia, Romania, Russian Federation, Serbia, Tajikistan, Turkey, Turkmenistan, Ukraine, Uzbekistan

DISTRIBUTION OF RISE SCORES BY PILLAR, 2010-19

Renewable energy



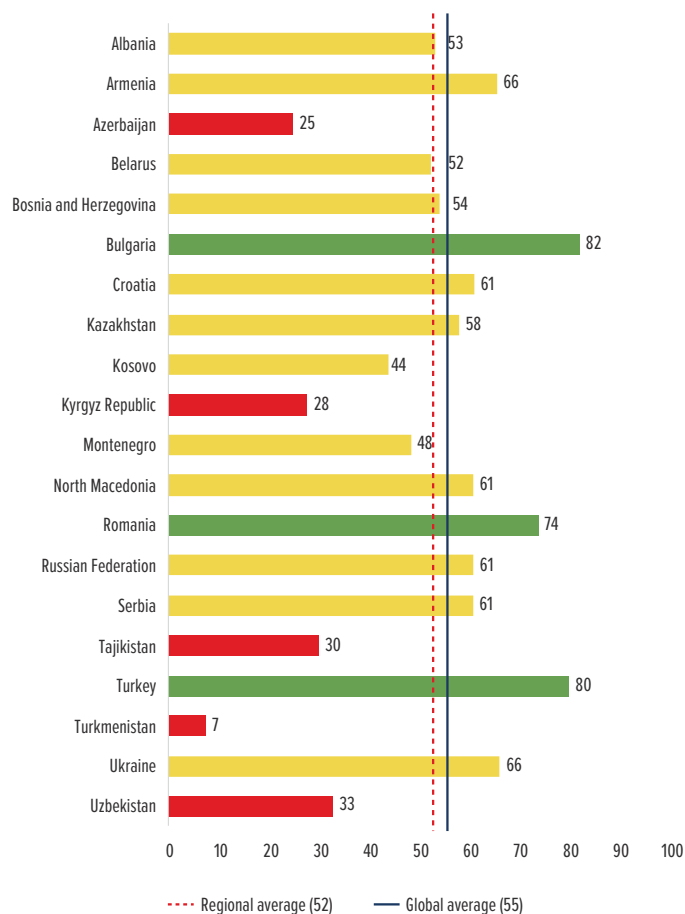
Energy efficiency



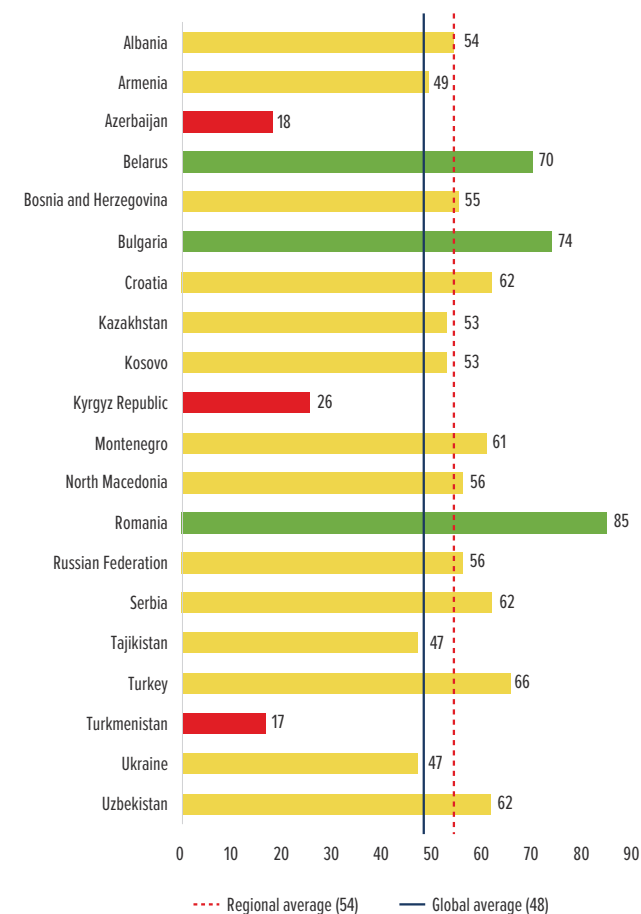
Source: World Bank, RISE 2020

COUNTRY SCORES BY PILLAR (OUT OF 100), 2019

Renewable energy

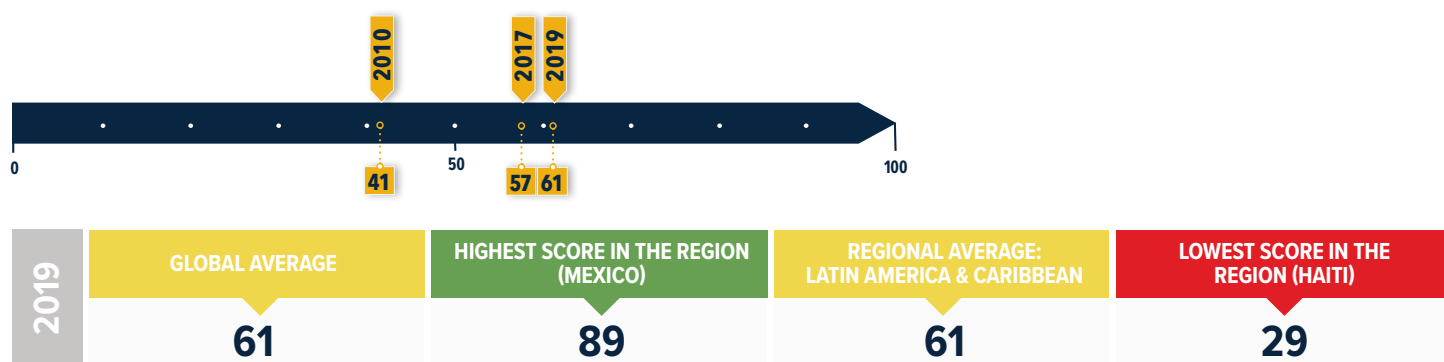


Energy efficiency



Source: World Bank, RISE 2020

LATIN AMERICA AND THE CARIBBEAN



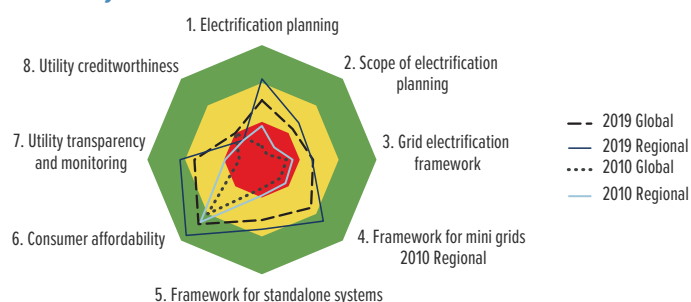
Source: World Bank, RISE 2020

KEY FINDINGS

- Latin America and the Caribbean achieved the same score as the global average (61) in 2019, making it the fourth-best-performing region after the OECD and Europe and Central Asia regions.
- Mexico remained the most advanced country in the region since 2017 thanks to its strong emphasis on investing in clean energy and access policies.
- The fastest-improving countries between 2017 and 2019 were Ecuador (70), Costa Rica (77), and Colombia (80), which achieved annual rates improvement of 5.7, 5.2, and 4.7 points, respectively. Between 2017 and 2019, Guatemala was among the fastest improvers on the access-specific pillars—electricity access and clean cooking. Colombia ranked among the region's top improvers on the clean energy pillars.
- Latin America and the Caribbean earned a higher score in electricity access (60) than other access-deficit regions, surpassing the global average by 7 points. The achievement reflects considerable progress on indicators such as the framework for mini grids, the framework for standalone systems, and electrification planning.
- The region's average score for renewable energy (53) is very close to the global average for the pillar (55), with scores on indicators such as the legal framework for renewable energy and planning for renewable energy expansion actually surpassing the global average. On the other hand, the region's score on energy efficiency (40) is 8 points below the global average for the pillar owing to low scores on indicators such as building energy codes and carbon pricing and monitoring.

INDICATOR PROGRESS BY PILLAR (OUT OF 100), 2010 AND 2019

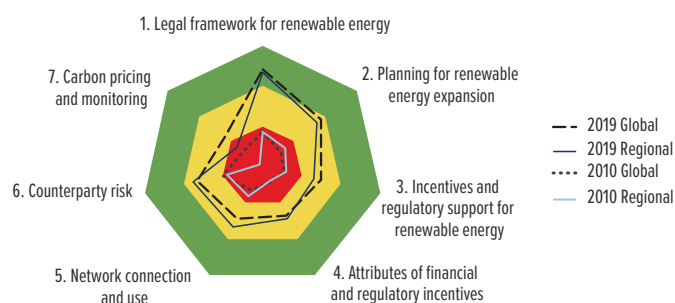
Electricity access



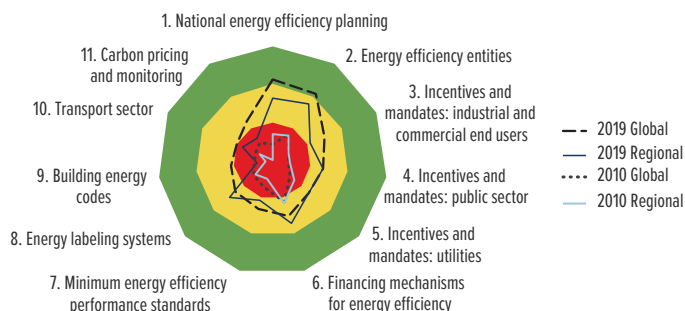
Clean cooking



Renewable energy



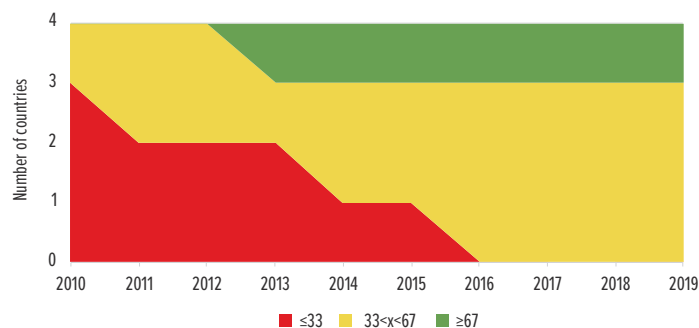
Energy efficiency



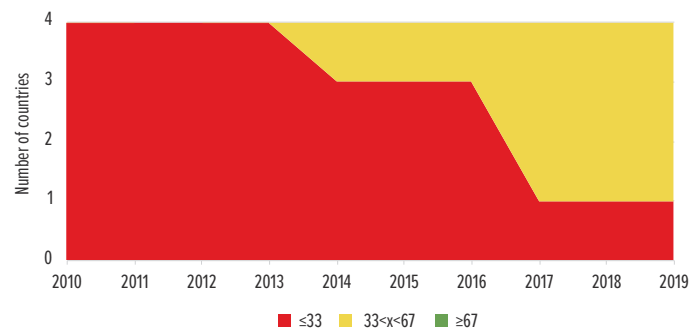
Source: World Bank, RISE 2020

DISTRIBUTION OF RISE SCORES BY PILLAR, 2010-19

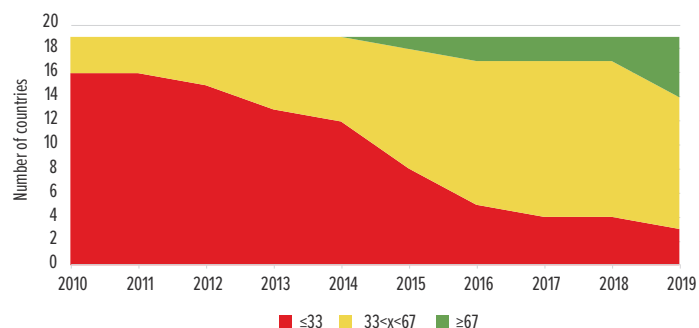
Electricity access^a



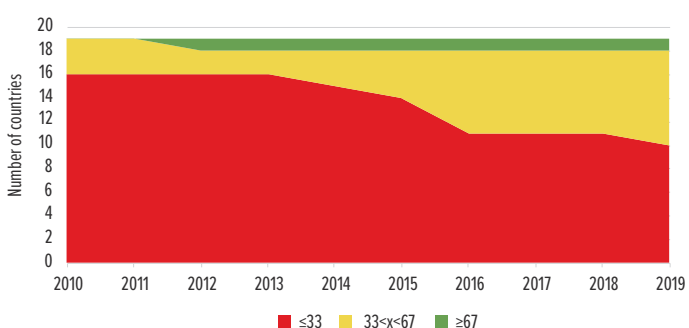
Clean cooking



Renewable energy^b



Energy efficiency



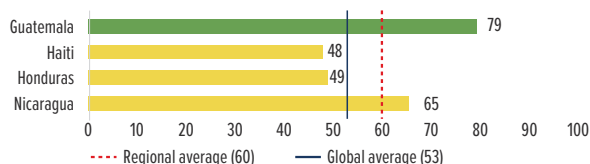
Source: World Bank, RISE 2020

a. The countries covered by the access pillars (electricity access and clean cooking) are Guatemala, Haiti, Honduras, and Nicaragua.

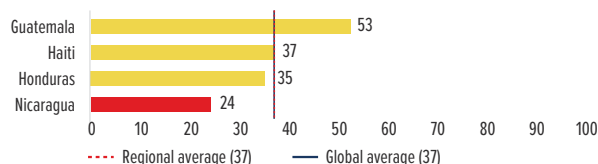
b. The countries covered by the clean energy pillars (renewable energy and energy efficiency) are Argentina, Bolivia, Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela, RB.

COUNTRY SCORES BY PILLAR (OUT OF 100), 2019

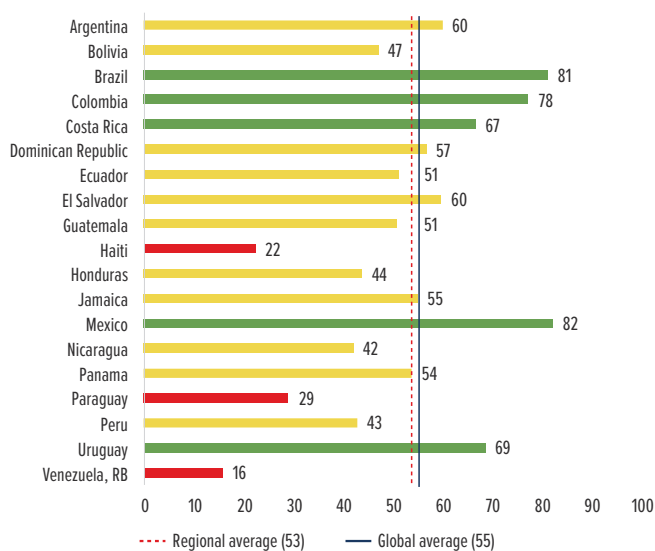
Electricity access



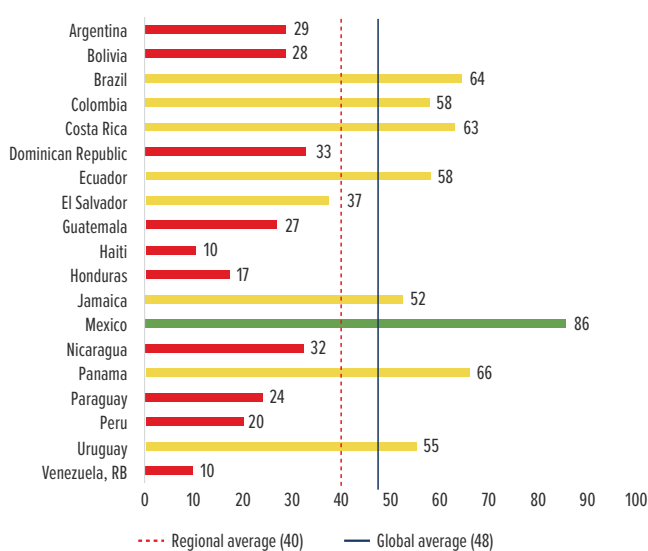
Clean cooking



Renewable energy

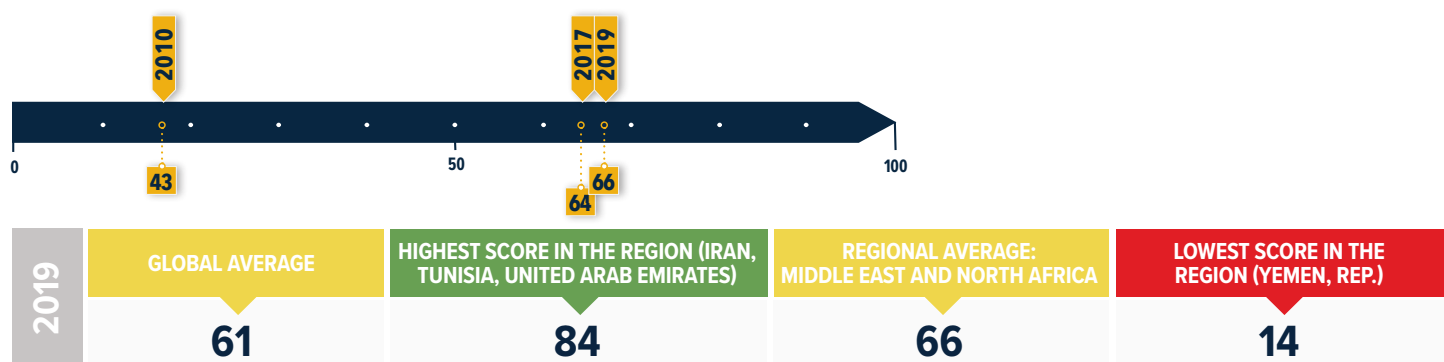


Energy efficiency



Source: World Bank, RISE 2020

MIDDLE EAST AND NORTH AFRICA



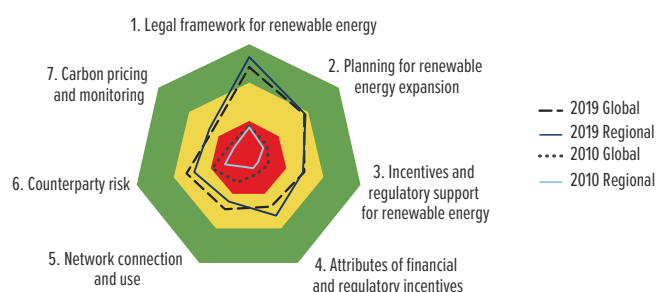
Source: World Bank, RISE 2020

KEY FINDINGS

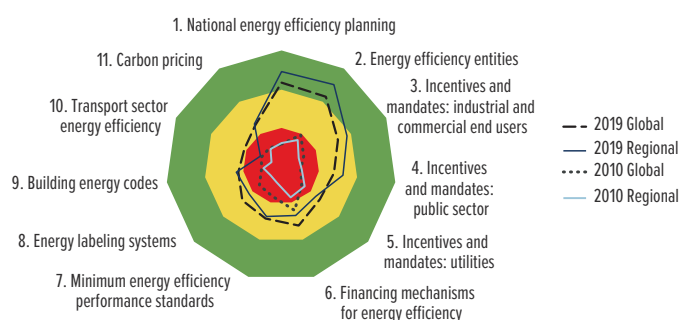
- The Middle East and North Africa region scored five points higher than the global average in 2019, with nine countries in the green zone (advanced policy frameworks) and only one in the red zone (undeveloped policy frameworks)¹.
- The regional average score is helped by strong performance from the Islamic Republic of Iran, Tunisia, and the United Arab Emirates, which all achieved the region's top score (84 points).
- Kuwait showed the fastest improvement on its RISE score between 2017 and 2019 in both renewable energy and energy efficiency, with scores on indicators such as renewable energy regulatory and financial incentives, measuring, reporting and verification (MRV) systems for greenhouse gas emissions, minimum energy efficiency performance standards, and energy efficiency labelling.
- The regional average for energy efficiency exceeds the global average, thanks to good scores on indicators such as national energy efficiency planning and energy efficiency entities.
- For renewable energy, the region's average score is the same as the global average. However, the lack of clear policies on energy efficiency in the transport sector, financing mechanisms for energy efficiency, and carbon pricing and monitoring continue to impede progress.

INDICATOR PROGRESS BY PILLAR (OUT OF 100), 2010 AND 2019

Renewable energy



Energy efficiency

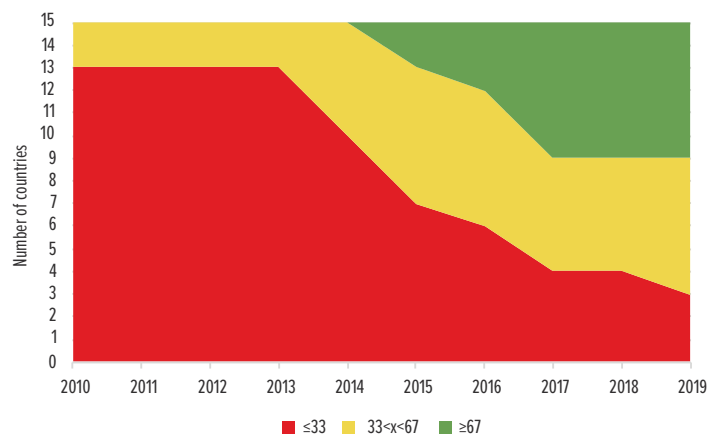


Source: World Bank, RISE 2020

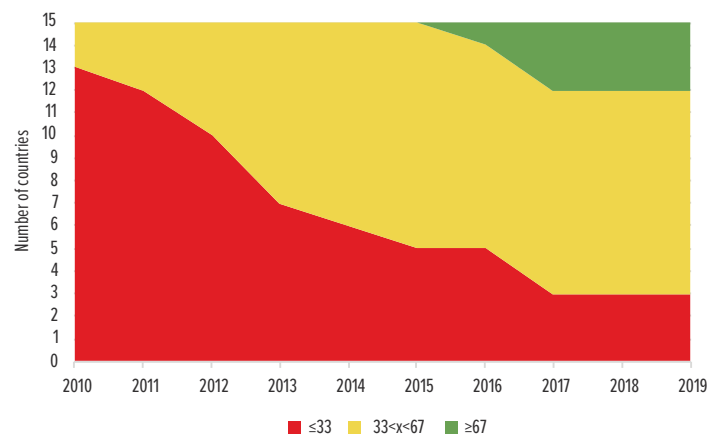
¹ RISE covers the following countries in the Middle East and North Africa region: Algeria, Bahrain, Egypt, Iran, Jordan, Kuwait, Lebanon, Morocco, Oman, Qatar, Saudi Arabia, Tunisia, United Arab Emirates, West Bank and Gaza, and Yemen, Rep. Because the Middle East and North Africa is considered a non-access-deficit region, all countries were assumed to have electrification rates of 100 percent. The Republic of Yemen is the only access deficit country in the region. For more information, see the RISE website: www.rise.worldbank.org.

DISTRIBUTION OF RISE SCORES BY PILLAR, 2010-19

Renewable energy



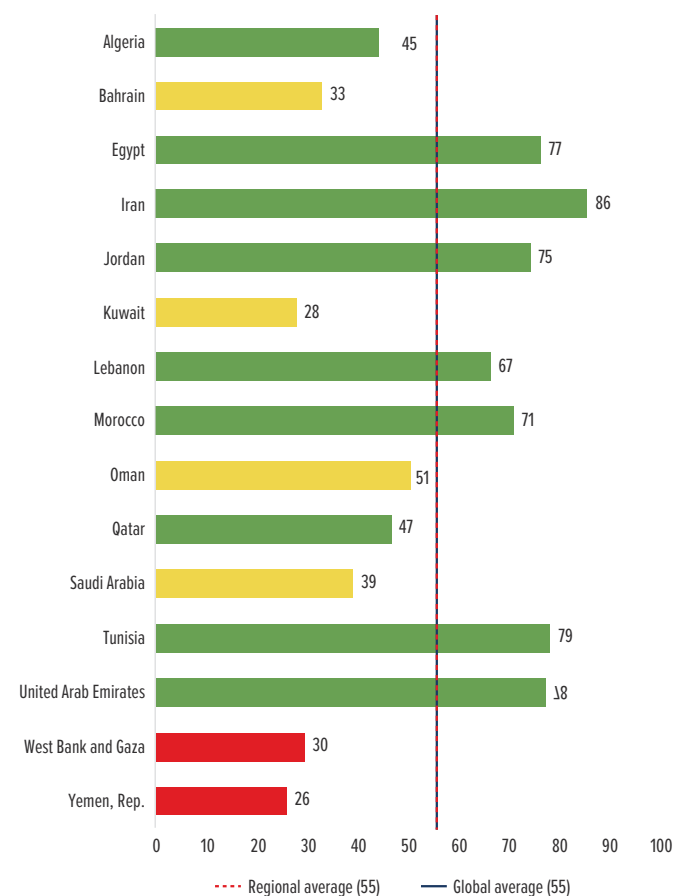
Energy efficiency



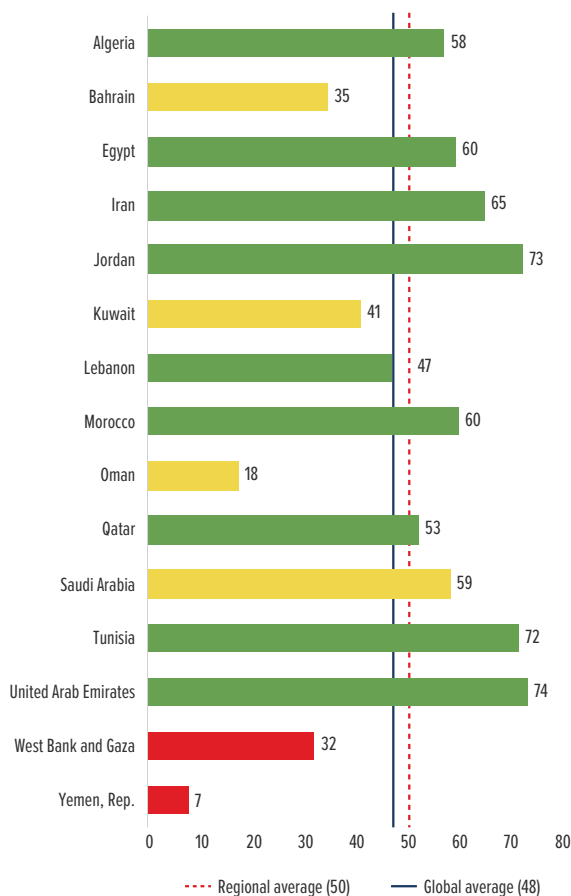
Source: World Bank, RISE 2020

COUNTRY SCORES BY PILLAR (OUT OF 100), 2019

Renewable Energy

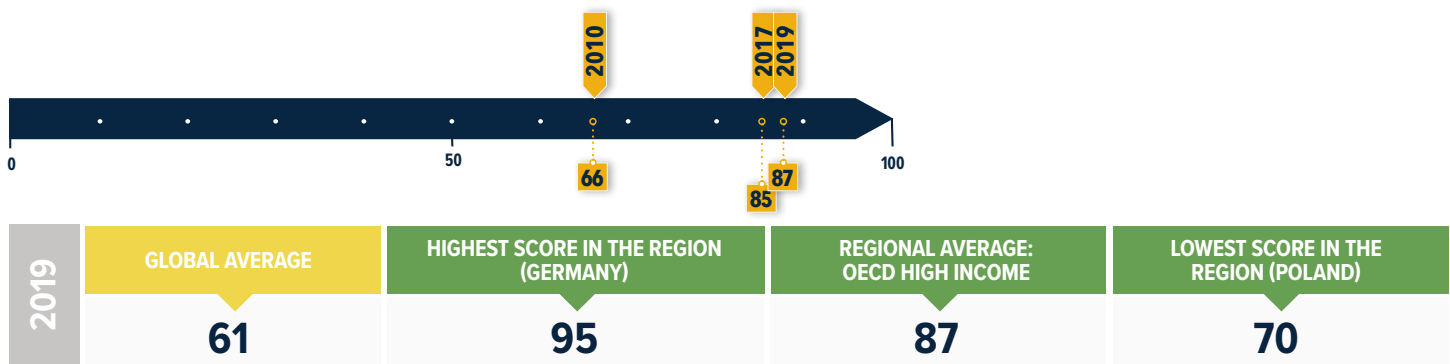


Energy efficiency



Source: World Bank, RISE 2020

OECD (HIGH-INCOME) COUNTRIES



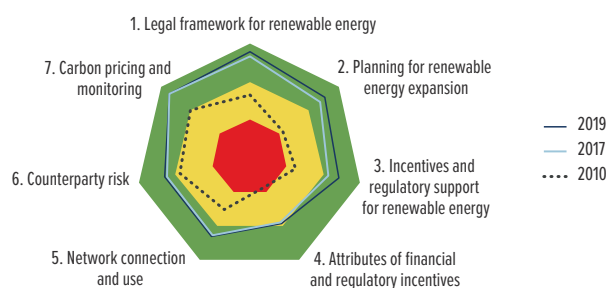
Source: World Bank, RISE 2020

KEY FINDINGS

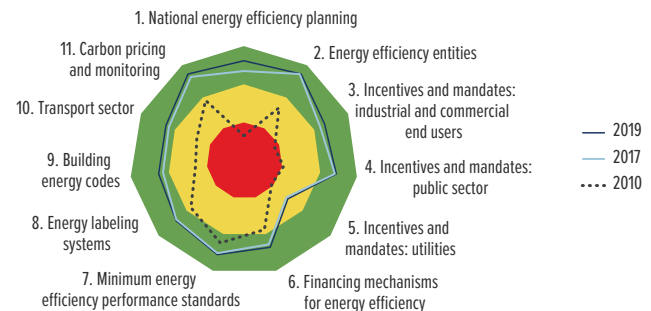
- The regional average score for the high-income countries of the Organisation for Economic Co-operation and Development (OECD) remains, unsurprisingly, the highest of the regions considered in RISE 2020¹.
- Germany is the most advanced country in the region in developing sustainable energy policy across all pillars of the RISE 2020 index, with Denmark following closely behind.
- The Republic of Korea and Switzerland were the fastest improvers in the region between 2017 and 2019.
- The region's scores for renewable energy remain higher than those for energy efficiency.
- Under the energy efficiency pillar, the lagging indicators are utilities incentives and mandates; under the renewable energy pillar, the lowest-scoring indicator is attributes of financial and regulatory incentives.

INDICATOR PROGRESS BY PILLAR (OUT OF 100), 2010, 2017 AND 2019

Renewable energy



Energy efficiency

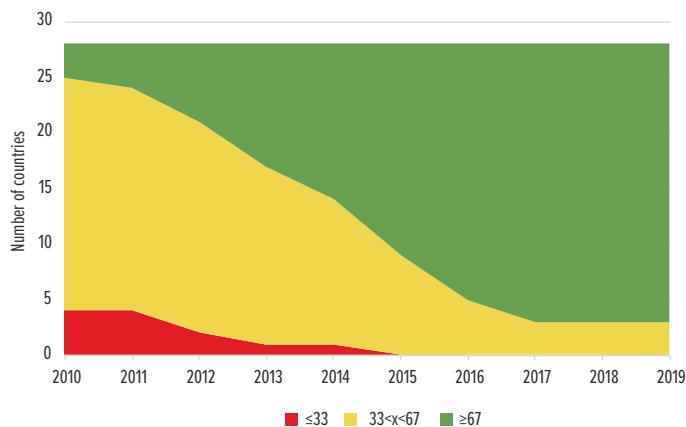


Source: World Bank, RISE 2020

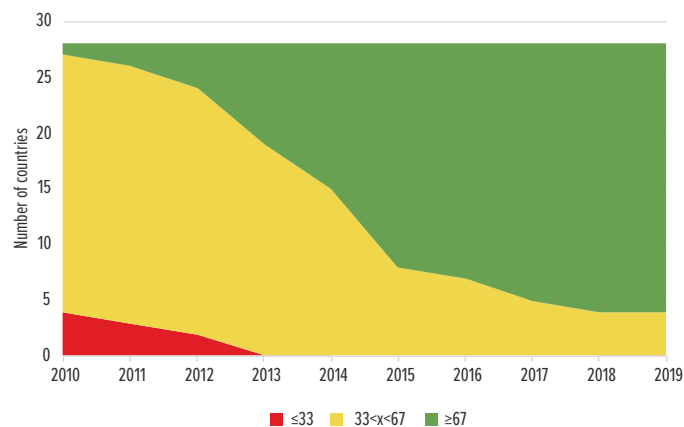
¹ Europe and Central Asia region is considered a nondeficit region, so all countries are assumed to have 100 percent electrification rates. The countries covered by the clean energy pillars (renewable energy and energy efficiency) are Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Japan, Korea, Rep., Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, United Kingdom, United States.

DISTRIBUTION OF RISE SCORES BY PILLAR, 2010-19

Renewable energy



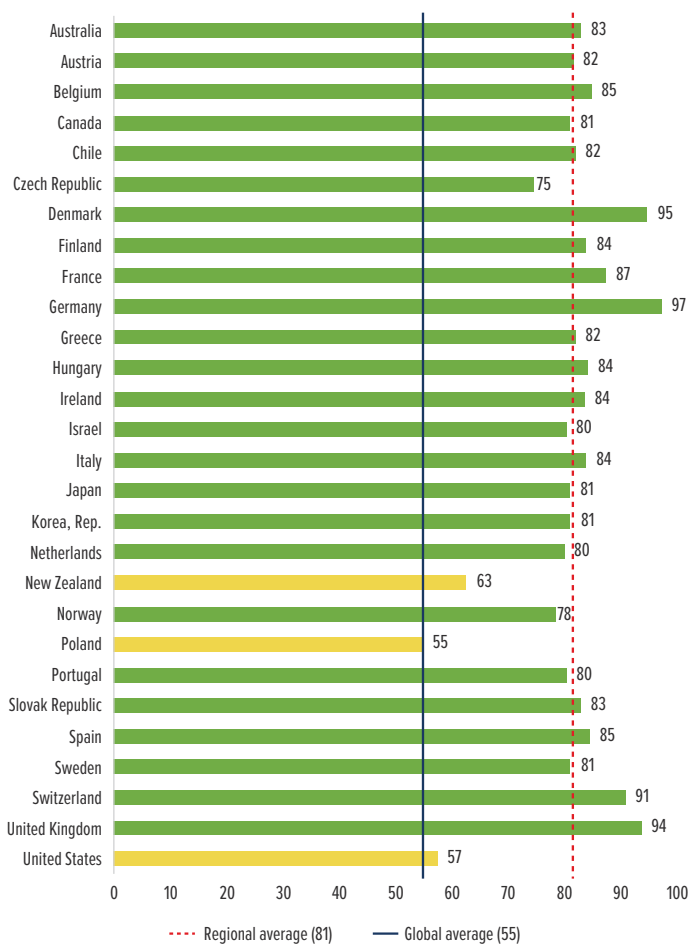
Energy efficiency



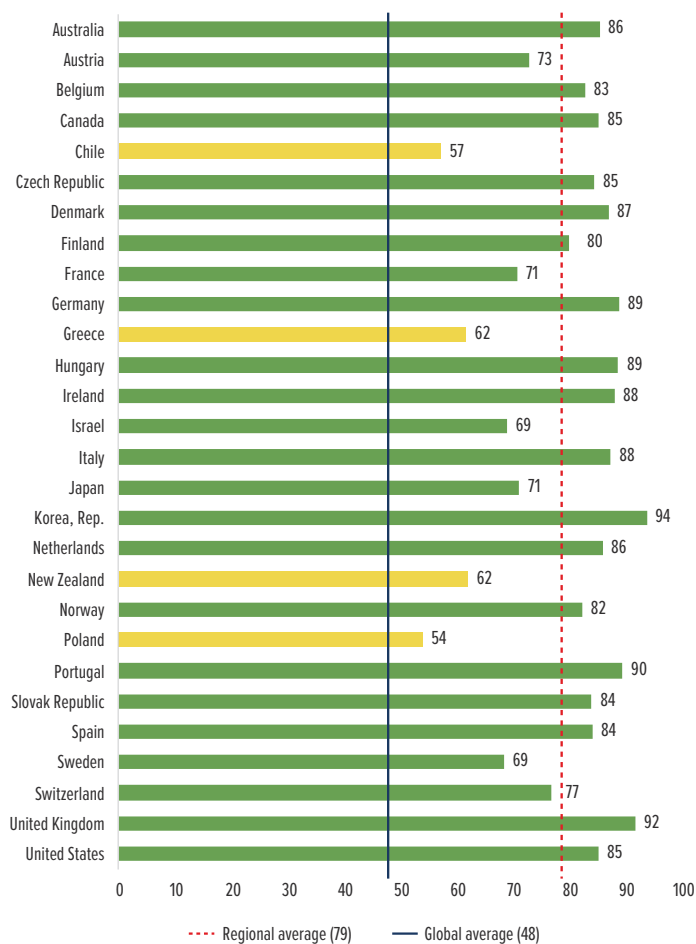
Source: World Bank, RISE 2020

COUNTRY SCORES BY PILLAR (OUT OF 100), 2019

Renewable energy

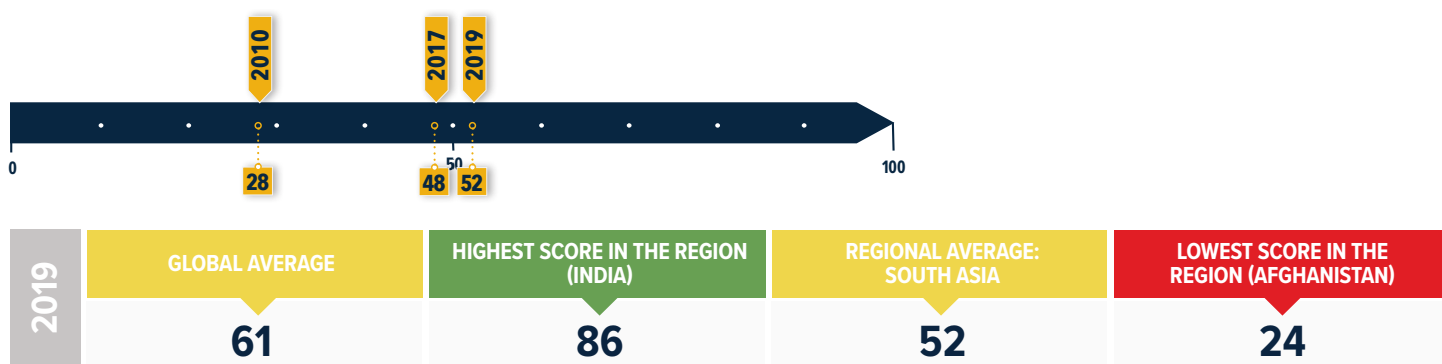


Energy efficiency



Source: World Bank, RISE 2020

SOUTH ASIA



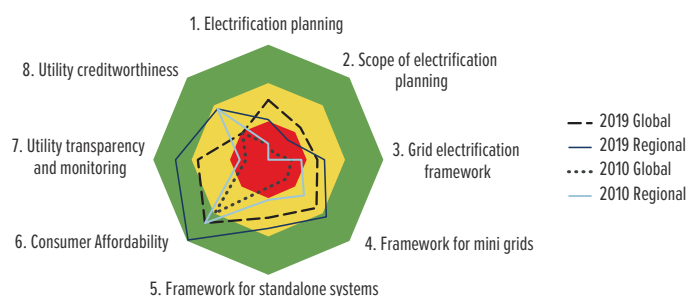
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KEY FINDINGS

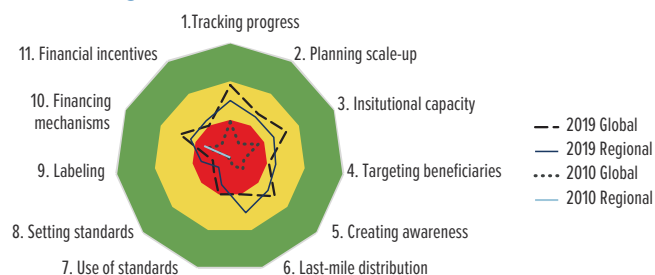
- As a region, South Asia scored 9 points lower than the global average in 2019. Most of the countries are in the yellow zone (intermediate level of performance), with only one country in the green zone and one country in the red zone¹.
- India remains the most advanced country in the region for developing sustainable energy policy across all pillars, with rising scores since 2010 on indicators such as regulatory support for renewable energy, counterparty risk, carbon pricing, and monitoring, reporting and verification (MRV) for emissions.
- Pakistan and Nepal were the fastest improvers in South Asia between 2017 and 2019.
- The regional average for electricity access was below the global average in 2019, although scores on indicators such as utility transparency and monitoring, consumer affordability, and frameworks for mini-grids actually exceeding the global average.
- South Asia's regional average score on clean cooking was significantly higher than the global average in 2019, with particularly strong scores on indicators such as last-mile distribution and labelling.
- The regional average score for renewable energy was lower than the global average in all areas in 2019, owing to lagging scores on indicators such as planning for renewable energy expansion and carbon pricing and monitoring.
- The regional average score for energy efficiency was significantly lower than the global average in 2019, with scores on indicators such as incentives and mandates in the public sector, transport sector energy efficiency, and energy labelling systems trailing the global average.

INDICATOR PROGRESS BY PILLAR (OUT OF 100), 2010 AND 2019

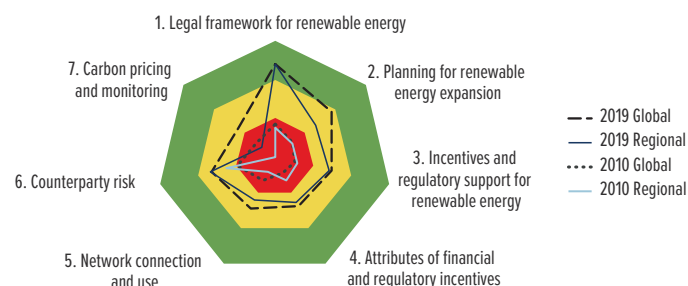
Electricity access



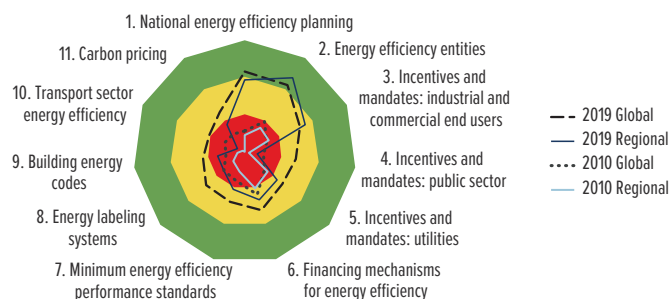
Clean cooking



Renewable energy



Energy efficiency

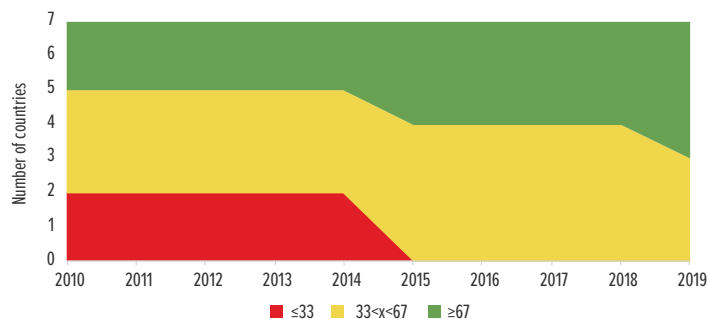


Source: World Bank, RISE 2020

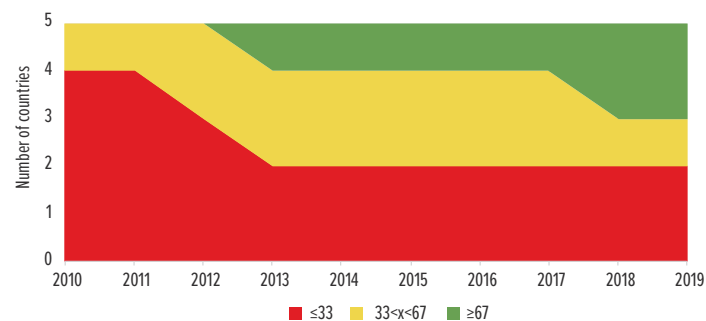
¹ RISE covers the following countries in South Asia: Afghanistan, Bangladesh, India, Maldives, Nepal, Pakistan, and Sri Lanka.

DISTRIBUTION OF RISE SCORES BY PILLAR, 2010-19

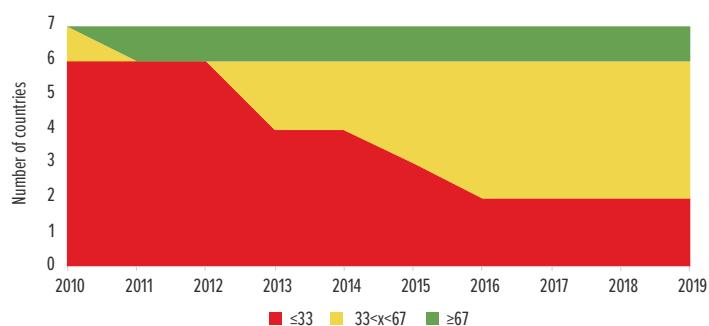
Electricity access



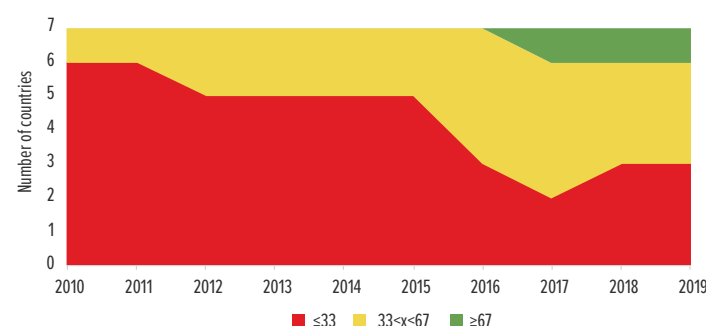
Clean cooking²



Renewable energy



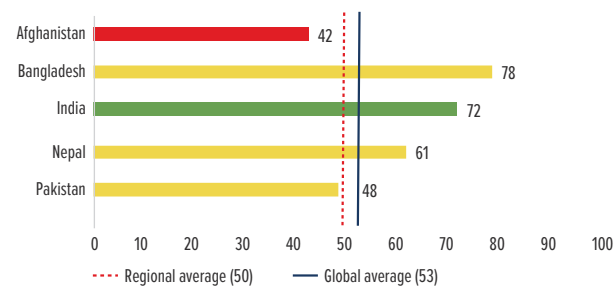
Energy efficiency



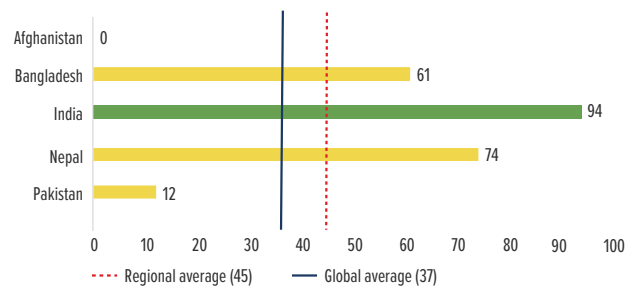
Source: World Bank, RISE 2020

COUNTRY SCORES BY PILLAR (OUT OF 100), 2019

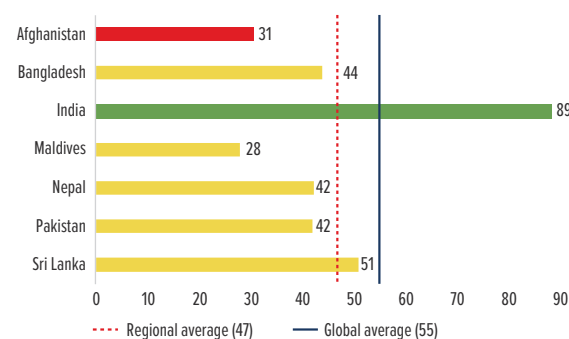
Electricity access



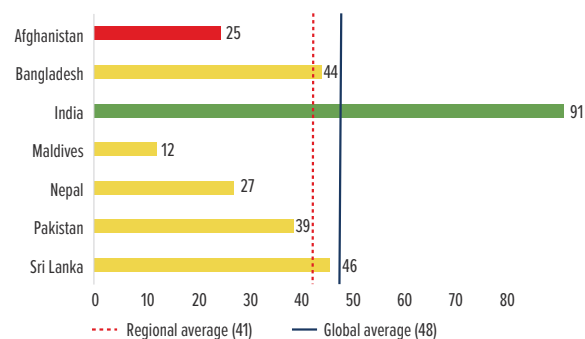
Clean cooking



Renewable energy



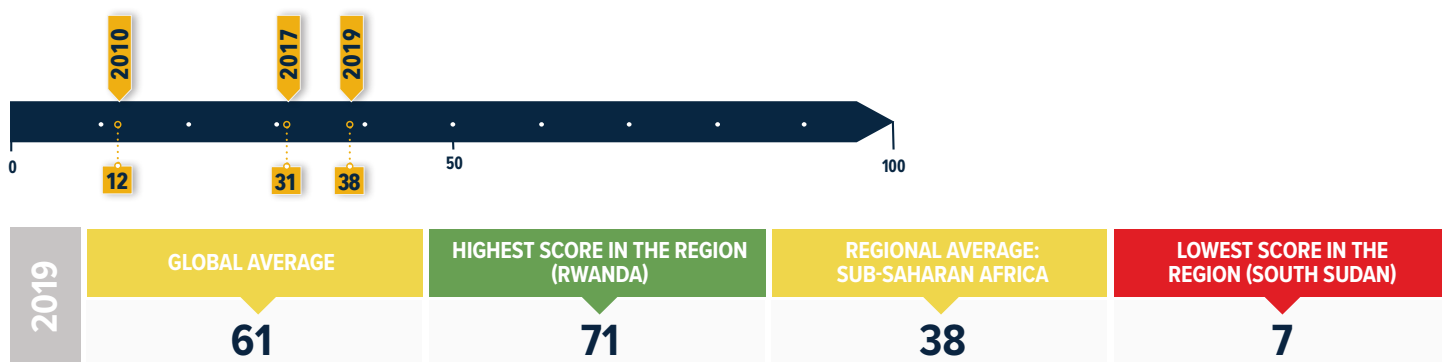
Energy efficiency



Source: World Bank, RISE 2020

2 Of the seven countries in the South Asia region, data on clean cooking was available for five: Afghanistan, Bangladesh, India, Nepal, and Pakistan.

SUB-SAHARAN AFRICA



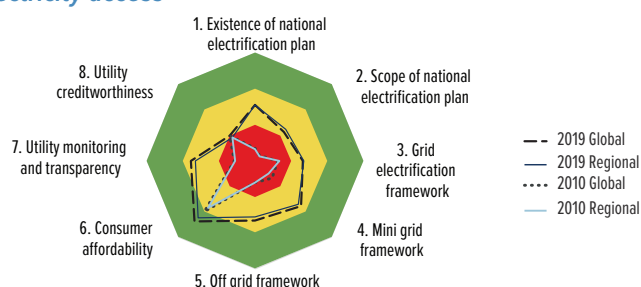
Source: World Bank, RISE 2020

KEY FINDINGS

- The region's average score is the lowest of all world regions: 17 out of 35 Sub-Saharan African countries covered under RISE are in the red zone¹.
- With moderately developed policy and regulatory frameworks on all four pillars of sustainable energy, Rwanda leads the region on the RISE 2020 index.
- Chad and Tanzania made the most progress across the four pillars between 2017 and 2019. Chad's progress was enabled by holistic improvements across renewable energy indicators – in 2018 alone, an action plan and target for renewable energy was instituted, and legal framework for private sector ownership of generation was set up along with aggressive utility energy efficiency incentive programs. Tanzania's fast progress was due to improvements in clean cooking planning, institutional capacity building, awareness, standards and consumer incentives, along with providing financial and regulatory support for renewable electricity, fixed-tariffs for small producers, renewable grid integration, and monitoring, reporting and verification for greenhouse gas emissions.
- In a positive development in electricity access policymaking, the Sub-Saharan Africa region caught up with the global average in 2019, even surpassing it on grid expansion and planning, but falling short on mini-grid and off-grid related policymaking, consumer affordability, and utility transparency and creditworthiness.
- One-fifth of the countries in the region have yet to adopt any clean cooking policies. With the exception of tracking progress on uptake, the region lags behind the global average on all other indicators of policymaking related to clean cooking.
- On renewable energy, not only does Sub-Saharan Africa trail the global average on every indicator, it is also slowing down global progress. Its performance is also particularly poor on energy efficiency, as half of the region's countries have yet to initiate meaningful policymaking on this pillar.

INDICATOR PROGRESS BY PILLAR (OUT OF 100), 2010 AND 2019

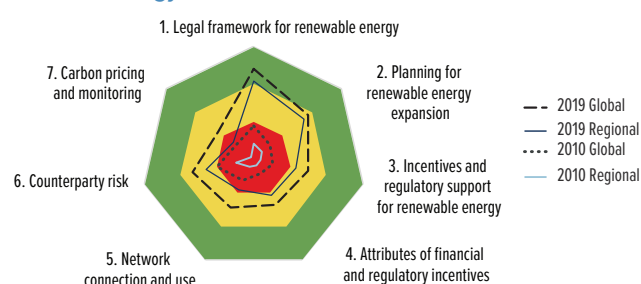
Electricity access



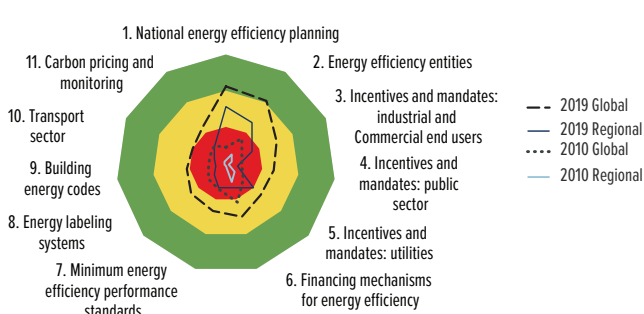
Clean cooking



Renewable energy



Energy efficiency

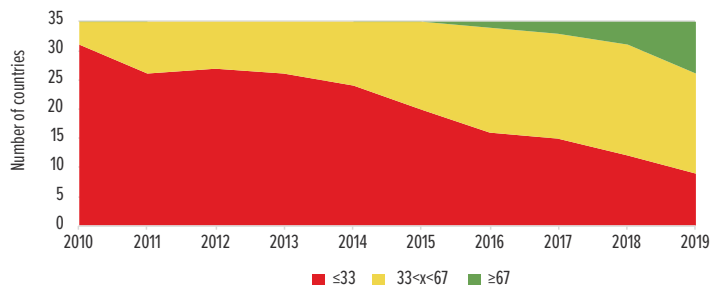


Source: World Bank, RISE 2020

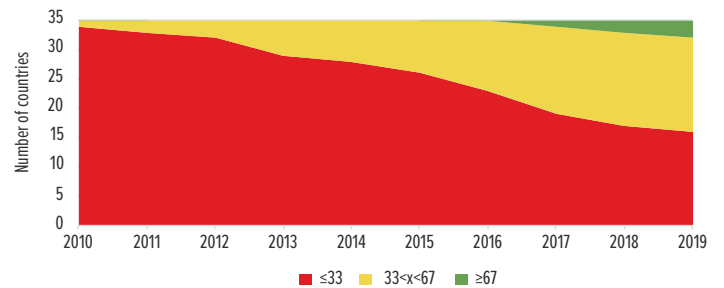
¹ RISE covers the following countries in Sub-Saharan Africa: Angola, Benin, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo, Dem. Rep., Congo, Rep., Côte d'Ivoire, Eritrea, Ethiopia, Ghana, Guinea, Kenya, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Tanzania, Togo, Uganda, Zambia, Zimbabwe

DISTRIBUTION OF RISE SCORES BY PILLAR, 2010-19

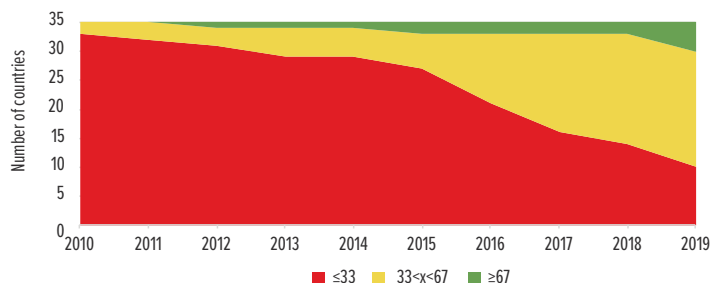
Electricity access



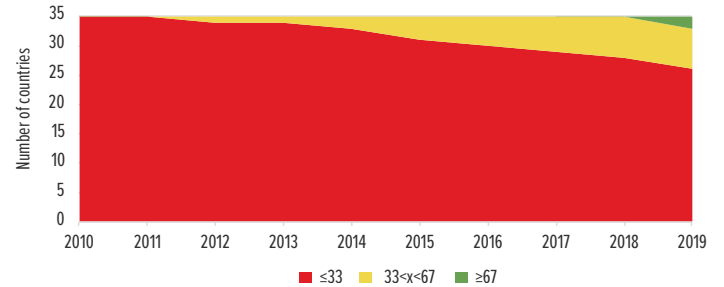
Clean cooking



Renewable energy



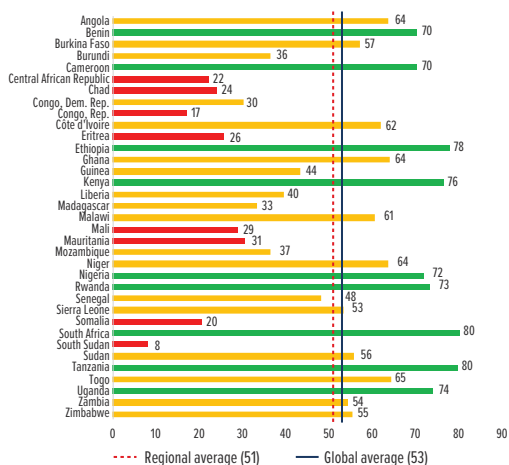
Energy efficiency



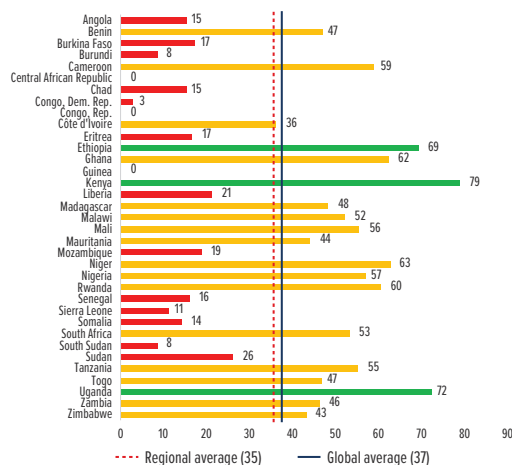
Source: World Bank, RISE 2020

COUNTRY SCORES BY PILLAR (OUT OF 100), 2019

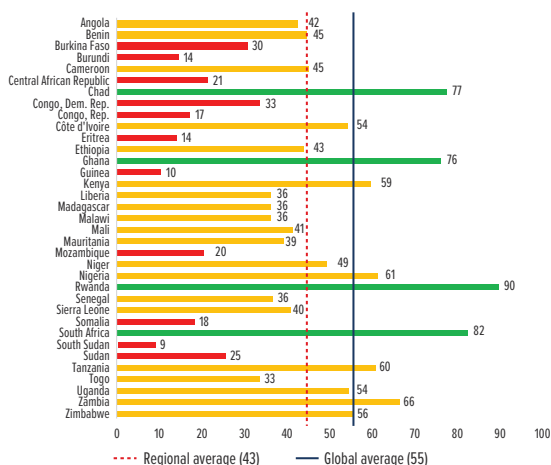
Electricity access



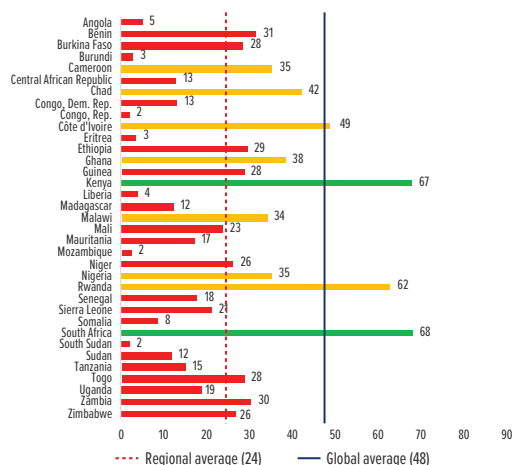
Clean cooking



Renewable energy



Energy efficiency



Source: World Bank, RISE 2020